



09-08-04

A78

Practitioner's Docket No. 001103

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Kishlock et al.

Application No.: 09/779,266 Group No.: 2863

Filed: February 8, 2001 Examiner: T. Lau

For: ENERGY EFFICIENCY MEASURING SYSTEM AND REPORTING METHODS

Mail Stop Appeal Briefs &amp; Patents

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

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MAR 12 2004

TRANSMITTAL OF APPEAL BRIEF  
(PATENT APPLICATION—37 C.F.R. § 1.192)

NOTE: The phrase "the date on which" an "appeal was taken" in 35 U.S.C. 154(b)(1)(A)(ii) (which provides an adjustment of patent term if there is a delay on the part of the Office to respond within 4 months after an "appeal was taken") means the date on which an appeal brief under § 1.192 (and not a notice of appeal) was filed. Compliance with § 1.192 requires that: 1. the appeal brief fee (§ 1.17(c)) be paid (§ 1.192(a)); and 2. the appeal brief complies with § 1.192(c)(1) through (c)(9). See Notice of September 18, 2000, 65 Fed. Reg. 56366, 56385-56387 (Comment 38).

1. Transmitted herewith, in triplicate, is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on August 5, 2003.

NOTE: "Appellant must, within two months from the date of the notice of appeal under § 1.191 or within the time allowed for reply to the action from which the appeal was taken, if such time is later, file a brief in triplicate. . . ." 37 C.F.R. § 1.192(a) (emphasis added).

## CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10\*

(When using Express Mail, the Express Mail label number is mandatory;  
Express Mail certification is optional.)

I hereby certify that, on the date shown below, this correspondence is being:

## MAILING

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37 C.F.R. § 1.8(a) 37 C.F.R. § 1.10 \*

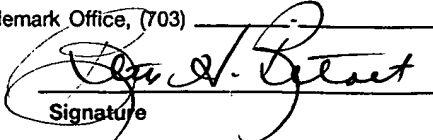
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Signature

Date: March 5, 2004

Beth H. Retort

(type or print name of person certifying)

\* Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office to Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

(Transmittal of Appeal Brief [9-6.1]—page 1 of 4)

03/10/2004 CNGUYEN 00000043 09779266

1005.00 DP 01 FC:2255

## 2. STATUS OF APPLICANT

This application is on behalf of

- ☐ other than a small entity.  
☒ a small entity.

A statement:

- ☐ is attached.  
☒ was already filed.

## 3. FEE FOR FILING APPEAL BRIEF

Pursuant to 37 C.F.R. § 1.17(c), the fee for filing the Appeal Brief is:

- ☒ small entity \$165.00  
☐ other than a small entity \$330.00

Appeal Brief fee due \$ 165.00

## 4. EXTENSION OF TERM

NOTE: 37 C.F.R. § 1.704(b) ". . .an applicant shall be deemed to have failed to engage in reasonable efforts to conclude processing or examination of an application for the cumulative total of any periods of time in excess of three months that are taken to reply to any notice or action by the Office making any rejection, objection, argument, or other request, measuring such three-month period from the date the notice or action was mailed or given to the applicant, in which case the period of adjustment set forth in § 1.703 shall be reduced by the number of days, if any, beginning on the day after the date that is three months after the date of mailing or transmission of the Office communication notifying the applicant of the rejection, objection, argument, or other request and ending on the date the reply was filed. The period, or shortened statutory period, for reply that is set in the Office action or notice has no effect on the three-month period set forth in this paragraph."

NOTE: The time periods set forth in 37 C.F.R. § 1.192(a) are subject to the provision of § 1.136 for patent applications. 37 C.F.R. § 1.191(d). See also Notice of November 5, 1985 (1060 O.G. 27).

NOTE: As the two-month period set in § 1.192(a) for filing an appeal brief is not subject to the six-month maximum period specified in 35 U.S.C. § 133, the period for filing an appeal brief may be extended up to seven months. 62 Fed. Reg. 53,131, at 53,156; 1203 O.G. 63, at 84 (Oct. 10, 1997).

The proceedings herein are for a patent application and the provisions of 37 C.F.R. § 1.136 apply.

(complete (a) or (b), as applicable)

- (a) ☒ Applicant petitions for an extension of time under 37 C.F.R. § 1.136 (fees: 37 C.F.R. § 1.17(a)(1)-(5)) for the total number of months checked below:

Extension (months)	Fee for other than small entity	Fee for small entity
<input type="checkbox"/> one month	\$ 110.00	\$ 55.00
<input type="checkbox"/> two months	\$ 420.00	\$ 210.00
<input type="checkbox"/> three months	\$ 950.00	\$ 475.00
<input type="checkbox"/> four months	\$ 1,480.00	\$ 740.00
<input checked="" type="checkbox"/> five months	\$ 2,010.00	\$ 1,005.00

Fee: \$ 1,005.00

If an additional extension of time is required, please consider this a petition therefor.

(check and complete the next item, if applicable)

- ☐ An extension for \_\_\_\_\_ months has already been secured, and the fee paid therefor of \$ \_\_\_\_\_ is deducted from the total fee due for the total months of extension now requested.

Extension fee due with this request \$ 1,005.00

or

- (b) ☐ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

##### 5. TOTAL FEE DUE

The total fee due is:

Appeal brief fee \$ 165.00

Extension fee (if any) \$ 1,005.00

**TOTAL FEE DUE \$ 1,170.00**

##### 6. FEE PAYMENT

- ☒ Attached is a ☐ check ☐ money order in the amount of \$ 1,170.00
- ☐ Authorization is hereby made to charge the amount of \$ \_\_\_\_\_
- ☒ to Deposit Account No. 11-1110
- ☐ to Credit card as shown on the attached credit card information authorization form PTO-2038.

**WARNING:** Credit card information should **not** be included on this form as it may become public.

- ☒ Charge any additional fees required by this paper or credit any overpayment in the manner authorized above.

A duplicate of this paper is attached.

##### 7. FEE DEFICIENCY

**NOTE:** If there is a fee deficiency and there is no authorization to charge an account, additional fees are necessary to cover the additional time consumed in making up the original deficiency. If the maximum six-month period has expired before the deficiency is noted and corrected, the application is held abandoned. In those instances where authorization to charge is included, processing delays are encountered in returning the papers to the PTO Finance Branch in order to apply these charges prior to action on the cases. Authorization to change the deposit account for any fee deficiency should be checked. See the Notice of April 7, 1986, 1065 O.G. 31-33.

- ☒ If any additional extension and/or fee is required,

AND/OR

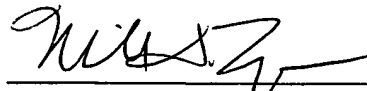
- ☒ If any additional fee for claims is required, charge:
- ☒ Deposit Account No. 11-1110
- ☐ Credit card as shown on the attached credit card information authorization form PTO-2038.

**WARNING:** Credit card information should **not** be included on this form as it may become public.

Date: March 5, 2004

Reg. No.: 41,142

Customer No.: 26285



SIGNATURE OF PRACTITIONER

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(Transmittal of Appeal Brief [9-6.1]—page 4 of 4)



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PATENT  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	Kishlock et al.	)	
		)	Examiner: Lau, T.
Serial No.:	09/779,266	)	
		)	Art Unit: 2863
Filing Date:	February 8, 2001	)	

Title: ENERGY EFFICIENCY MEASURING SYSTEM AND REPORTING  
METHODS

**APPELLANTS' BRIEF BEFORE THE  
BOARD OF PATENT APPEALS AND INTERFERENCES UNDER 37 C.F.R. § 1.192**

Pittsburgh, Pennsylvania 15222

March 5, 2004

Commissioner for Patents  
Box 1450  
Arlington, VA 22313-1450

Dear Sir:

Applicants of the above-identified application submit this brief in  
accordance with 37 C.F.R. §§ 1.191-1.192 in response to the Office Action dated  
May 5, 2003 and pursuant to the Notice of Appeal filed August 5, 2003.

**I. Real Party In Interest**

The real party in interest is the owner of record of the application,  
Weatherwise USA, Inc.

03/10/2004 CNGUYEN 00000043 09779266

02 FC:2402

165.00 DP

## **II. Related Appeals and Interferences**

There are no known appeals or interferences that will directly affect or be directly affected by or have a bearing on the decision of the Board of Patent Appeals and Interferences ("Board") in the present case.

## **III. Status of the Claims**

On August 5, 2003, Appellants filed a Notice of Appeal in connection with the above-identified application. Specifically, Appellants appealed the rejection of claims 1-4, 9, 10, 14, 15, 19 and 21 as presented in the final Office Action dated May 5, 2003 (the "Office Action"). As understood by the Appellants, claims 1-4, 9, 10, 14, 15, 19 and 21, on appeal, remain pending and stand rejected. Claims 1-4, 9, 10, 14, 15, 19 and 21 are set forth in the Appendix. In the Office Action, claims 22-28 were allowed and claims 5-8, 11-13, 16-18 and 20 were objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

In the Office Action, claims 1-4, 9, 10, 14, 15, 19 and 21 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,843,575 to Crane (hereinafter "Crane").

## **IV. Status of Amendments**

Appellants filed a Notice of Appeal on August 5, 2003 and there was no amendment filed after the Office Action dated May 5, 2003.

## **V. Summary of Invention**

The present invention, in various embodiments, relates to energy efficiency measuring systems and methods. According to various embodiments,

the present invention receives, processes, and reports data regarding retail consumers' energy usage (e.g., consumption in volumes of fuel or energy units). For each group of energy usage data to be processed, historic weather data such as, for example, heating degree days, cooling degree days, relative humidity, dew point, atmospheric pressure and precipitation are collected. Energy efficiency changes are calculated based on the energy usage and weather data and the efficiency changes are reported to each consumer. *See* Specification, Summary of the Invention.

#### **VI. Issue**

Whether claims 1-4, 9, 10, 14, 15, 19 and 21 were properly rejected as being anticipated by Crane under 35 U.S.C. § 102(b).

#### **VII. Grouping of Claims**

Claims 1-4, 9, 10, 14, 15, 19 and 21, on appeal, stand or fall together.

#### **VIII. Argument**

In the Office Action dated May 5, 2003, claims 1-4, 9, 10, 14, 15, 19 and 21 were rejected under 35 U.S.C. § 102(b) as being anticipated by Crane. Appellants submit, however, that Crane does not teach or suggest all of the elements of claims 1-4, 9, 10, 14, 15, 19 and 21.

The invention of claim 1 provides:

A method of providing energy efficiency changes to a plurality of energy consumers, comprising:

calculating the energy efficiency changes for the consumers based on energy consumption histories and weather data, wherein the energy efficiency changes are calculated using individual data for each of the consumers, wherein the energy efficiency changes represent changes to an entire consumption

pattern related to at least one physical structure, and wherein the energy efficiency changes include considerations of at least one of equipment, consumer behavior, and physical aspects of the physical structure and spaces within the physical structure; and

reporting the energy efficiency changes to each of the consumers.

Appellants respectfully submit that Crane fails to teach or suggest at least the step of:

calculating the energy efficiency changes for the consumers based on energy consumption histories and weather data, wherein the energy efficiency changes are calculated using individual data for each of the consumers, wherein the energy efficiency changes represent changes to an entire consumption pattern related to at least one physical structure, and wherein the energy efficiency changes include considerations of at least one of equipment, consumer behavior, and physical aspects of the physical structure and spaces within the physical structure

In the Office Action, the Examiner indicates that Crane at col. 2, line 62 through col. 3, line 2 and col. 9, lines 3-9 teaches “calculating the energy efficiency changes for the consumers based on energy consumption histories and weather data.” Appellants submit that such passages do not teach the cited portion of claim 1. The passage at col. 2, line 62 through col. 3, line 2 does not discuss consumption histories or weather data but rather discusses “computer analysis of a powered system [e.g., rotating shaft devices such as generating plants, ships, locomotives, aircraft, cars, trucks, buses] by comparing real-time generated data with past recorded data to determine the relative operation of the powered system compared to the operation of the powered system in the past under similar operating conditions.” “Similar operating conditions” in Crane include weather as a means of comparison to “similar,” however it is part of the state-point, and not an input for analysis through model development as in embodiments of the present invention. Also, the cited passage does not discuss



consumers (e.g. retail consumers such as residential or small to medium-sized commercial customers) but rather teaches rotating shaft devices. Likewise, the passage at col. 9, lines 3-9 teaches that the nautical system of the patent is linked to weather and navigational satellites so that “[p]roper power and speed levels can be attained, with assurance that the ship is on course and is operating most efficiently in existing weather conditions.” Appellants submit that the cited passage does not teach that “energy consumption histories are used” and that energy efficiency changes are calculated as claimed in claim 1. Rather, efficiency of operation of a ship is taught. The efficiency of operation of the ship is a real-time efficiency that is calculated from real-time inputs. *See, e.g.*, Crane, col. 4, lines 42-52. The real-time efficiency is compared to the optimal efficiency that is expected based on present operating conditions. The optimal efficiency is calculated based on historic data under, for example, similar weather conditions. *See id.*, col. 20, lines 22-45. Thus, an instantaneous measurement of fuel consumption is required rather than “energy consumption histories” as claimed in claim 1.

In the Office Action, the Examiner indicates that Crane at col. 3, lines 17-35 teaches “wherein the energy efficiency changes represent changes to an entire consumption pattern related to at least one physical structure.” However, Appellants submit that the cited passage teaches that “a processor ... receives inputs from real-time sensors relating to real-time variables affecting the operation of [a] ... powered system...[A] local processor is programmed to determine various efficiency related parameters...” Appellants submit that the cited passage does not teach that “efficiency changes represent changes to an *entire consumption pattern* related to at least one physical structure” as claimed in claim 1 (emphasis added).

Appellants respectfully submit that Crane fails to teach or suggest at least the step of:

reporting the energy efficiency changes to each of the consumers

In the Office Action, the Examiner indicates that Crane at col. 3, lines 17-35 and Fig. 1 (unit 32, 16) teaches such a step. Appellants submit that Crane at col. 3, lines 17-35 does not discuss “reporting energy efficiency changes.” Also, Appellants submit that the terminal 16 of Crane is for accepting manual inputs, not reporting energy efficiency changes. *See* Crane, col. 6, lines 28-31 and col. 12, lines 20-24. Likewise, the ship efficiency indicator 32 of Crane is not for reporting energy efficiency changes that are calculated based on energy consumption histories *and weather data* as claimed in claim 1. Instead, the ship efficiency indicator 32 takes into account such data as speed, balance between twin screw shafts, trim, steering, and boiler and condenser conditions. *See* Crane, col. 20, lines 22-68. Thus, Crane does not teach that the ship efficiency indicator 32 takes into account weather data.

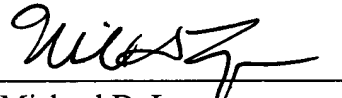
Appellants submit that independent claims 10, 15, 19 and 21 contain elements that are analogous to those discussed above in connection with claim 1.

Therefore, Appellants submit that Crane does not teach or suggest every element of independent claims 1, 10, 15, 19 and 21. Thus, Appellants submit that claims 1, 10, 15, 19 and 21, and dependent claims 2-4 and 9, 14, and 19, which depend therefrom, respectively, are not anticipated by Crane.

## IX. Conclusion

For the forgoing reasons, Appellants submit that the Examiner's rejection of claims 1-4, 9, 10, 14, 15, 19 and 21 is erroneous, and reversal of the Office's decision is respectfully requested.

Respectfully submitted,



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## **APPENDIX**

### **Claims on Appeal**

1. A method of providing energy efficiency changes to a plurality of energy consumers, comprising:  
calculating the energy efficiency changes for the consumers based on energy consumption histories and weather data, wherein the energy efficiency changes are calculated using individual data for each of the consumers, wherein the energy efficiency changes represent changes to an entire consumption pattern related to at least one physical structure, and wherein the energy efficiency changes include considerations of at least one of equipment, consumer behavior, and physical aspects of the physical structure and spaces within the physical structure; and  
reporting the energy efficiency changes to each of the consumers.
2. The method of claim 1, wherein reporting the energy efficiency changes to each of the consumers includes reporting the energy efficiency changes to each of the consumers on an individual basis.
3. The method of claim 1, wherein reporting the energy efficiency changes to each of the consumers includes reporting the energy efficiency changes to each of the consumers on an aggregate basis.
4. The method of claim 1, wherein reporting the energy efficiency changes to each of the consumers includes reporting the energy efficiency changes to each of the consumers on an individual basis as compared to an aggregate.
5. The method of claim 1, wherein calculating the energy efficiency changes includes calculating the energy efficiency changes for the consumers based on prior and subsequent period weather data and consumption histories.
6. The method of claim 5, further comprising calculating the consumption histories based on data that are cleaned using cleaning algorithms and human intervention.

7. The method of claim 5, further comprising assuring the quality of the energy efficiency changes using hand calculations and analysis.

8. The method of claim 7, wherein assuring the quality includes using normal ratios to test a reasonableness of the energy efficiency changes.

9. The method of claim 1, wherein reporting the energy efficiency changes to each of the consumers includes reporting the energy efficiency changes to each of the consumers using at least one of the Internet, an intranet, a computer-readable medium, direct mail, telephone, electronic mail, in-person visits, and facsimile.

10. An energy efficiency measurement and reporting system, comprising:

- a generic import module for receiving consumer data;
- a weather import module for receiving weather data;
- a unique algorithm generation module in communication with the generic import module and the weather import module;
- an actual weather consumption estimate module in communication with the unique algorithm generation module;
- an efficiency measurement module in communication with the actual weather consumption estimate module, wherein the efficiency measurement module calculates energy efficiency changes for a plurality of energy consumers based on energy consumption histories and the weather data, wherein the energy efficiency changes are calculated using individual data for each of the consumers, wherein the energy efficiency changes represent changes to an entire consumption pattern related to at least one physical structure, and wherein the energy efficiency changes include considerations of at least one of equipment, consumer behavior, and physical aspects of the physical structure and spaces within the physical structure; and
- an individual report generation module in communication with the efficiency measurement module.

11. The system of claim 10, further comprising:  
a data cleaning module in communication with the generic import module; and  
a weather cleaning module in communication with the weather import module.
12. The system of claim 10, further comprising a quality assurance module in communication with the individual report generation module.
13. The system of claim 12, further comprising a report transmittal module in communication with the quality assurance module.
14. The system of claim 10, further comprising an aggregate report generation module in communication with the individual report generation module.
15. An energy efficiency measurement and reporting system, comprising:  
a generic import module for receiving consumer data;  
a weather import module for receiving weather data;  
a system database in communication with the generic import module and the weather import module;  
a unique algorithm generation module in communication with the system database;  
an actual weather consumption estimate module in communication with the system database;  
an efficiency measurement module in communication with the system database, wherein the efficiency measurement module calculates energy efficiency changes for a plurality of energy consumers based on energy consumption histories and the weather data, wherein the energy efficiency changes are calculated using individual data for each of the consumers, wherein the energy efficiency changes represent changes to an entire consumption pattern related to at least one physical structure, and wherein the energy efficiency changes include considerations of at least one of equipment, consumer behavior, and physical aspects of the physical structure and spaces within the physical structure; and  
an individual report generation module in communication with the system database.
16. The system of claim 15, further comprising:

a data cleaning module in communication with the system database; and

a weather cleaning module in communication with the system database.

17. The system of claim 15, further comprising a quality assurance module in communication with the individual report generation module.

18. The system of claim 17, further comprising a report transmittal system in communication with the quality assurance module.

19. The system of claim 15, further comprising a trend calculation module in communication with the system database and the individual report generation module.

20. The system of claim 17, further comprising an aggregate report generation module in communication with the individual report generation module and the quality assurance module.

21. A computer-readable medium having stored thereon instructions which, when executed by a processor, cause the processor to perform the steps of:

calculating energy efficiency changes for a plurality of energy consumers based on energy consumption histories and weather data, wherein the energy efficiency changes are calculated using individual data for each of the consumers, wherein the energy efficiency changes represent changes to an entire consumption pattern related to at least one physical structure, and wherein the energy efficiency changes include considerations of at least one of equipment, consumer behavior, and physical aspects of the physical structure and spaces within the physical structure; and

reporting the energy efficiency changes to each of the consumers.

22. A method of providing energy efficiency changes to a plurality of energy consumers, comprising:

calculating a plurality of prior and subsequent period consumption histories based on data that are cleaned using cleaning algorithms and human intervention;

calculating the energy efficiency changes for the consumers based on prior and subsequent period weather data and the prior and subsequent period consumption histories, wherein the energy efficiency changes are calculated using individual data for each of the consumers; and

reporting the energy efficiency changes to each of the consumers.

23. A method of providing energy efficiency changes to a plurality of energy consumers, comprising:  
calculating the energy efficiency changes for the consumers based on prior and subsequent period weather data and prior and subsequent period consumption histories, wherein the energy efficiency changes are calculated using individual data for each of the consumers;  
assuring the quality of the energy efficiency changes using hand calculations and analysis; and  
reporting the energy efficiency changes to each of the consumers.

24. The method of claim 23, wherein assuring the quality includes using normal ratios to test a reasonableness of the energy efficiency changes.

25. An energy efficiency measurement and reporting system, comprising:  
a generic import module for receiving consumer data;  
a weather import module for receiving weather data;  
a unique algorithm generation module in communication with the generic import module and the weather import module;  
an actual weather consumption estimate module in communication with the unique algorithm generation module;  
an efficiency measurement module in communication with the actual weather consumption estimate module, wherein the efficiency measurement module calculates energy efficiency changes for a plurality of energy consumers based on energy consumption histories and the weather data, and wherein the energy efficiency changes are calculated using individual data for each of the consumers;  
an individual report generation module in communication with the efficiency measurement module; and  
a quality assurance module in communication with the individual report generation module.



26. The system of claim 25, further comprising a report transmittal module in communication with the quality assurance module.

27. An energy efficiency measurement and reporting system, comprising:

- a generic import module for receiving consumer data;
- a weather import module for receiving weather data;
- a system database in communication with the generic import module and the weather import module;
- a unique algorithm generation module in communication with the system database;
- an actual weather consumption estimate module in communication with the system database;
- an efficiency measurement module in communication with the system database, wherein the efficiency measurement module calculates energy efficiency changes for a plurality of energy consumers based on energy consumption histories and the weather data, and wherein the energy efficiency changes are calculated using individual data for each of the consumers;
- an individual report generation module in communication with the system database; and
- a quality assurance module in communication with the individual report generation module.

28. The system of claim 27, further comprising an aggregate report generation module in communication with the individual report generation module and the quality assurance module.